

# Samuel A Mcdonald

## List of Publications by Year in descending order

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papers

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623734

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g-index

24  
all docs

24  
docs citations

24  
times ranked

1000  
citing authors

#	ARTICLE	IF	CITATIONS
1	Correlative Tomography. Scientific Reports, 2014, 4, 4711.	3.3	124
2	Non-destructive mapping of grain orientations in 3D by laboratory X-ray microscopy. Scientific Reports, 2015, 5, 14665.	3.3	114
3	Repeated crack healing in MAX-phase ceramics revealed by 4D in situ synchrotron X-ray tomographic microscopy. Scientific Reports, 2016, 6, 23040.	3.3	80
4	Microstructural evolution during sintering of copper particles studied by laboratory diffraction contrast tomography (LabDCT). Scientific Reports, 2017, 7, 5251.	3.3	58
5	<i>In situ</i> 3D X-ray microtomography study comparing auxetic and non-auxetic polymeric foams under tension. Physica Status Solidi (B): Basic Research, 2011, 248, 45-51.	1.5	53
6	Comparison of the Mechanical Behaviour of Standard and Auxetic Foams by X-ray Computed Tomography and Digital Volume Correlation. Strain, 2013, 49, 467-482.	2.4	41
7	X-ray tomographic imaging of Ti/SiC composites. Journal of Microscopy, 2003, 209, 102-112.	1.8	34
8	Time-dependent in situ measurement of atmospheric corrosion rates of duplex stainless steel wires. Npj Materials Degradation, 2018, 2, .	5.8	34
9	Characterization of the three-dimensional structure of a metallic foam during compressive deformation. Journal of Microscopy, 2006, 223, 150-158.	1.8	31
10	Piezomorphic Materials. Macromolecular Materials and Engineering, 2013, 298, 318-327.	3.6	27
11	Application of a Quasi In Situ Experimental Approach to Estimate 3-D Pitting Corrosion Kinetics in Stainless Steel. Journal of the Electrochemical Society, 2016, 163, C745-C751.	2.9	23
12	Tracking capsule activation and crack healing in a microcapsule-based self-healing polymer. Scientific Reports, 2019, 9, 17773.	3.3	22
13	Tracking polycrystal evolution non-destructively in 3D by laboratory X-ray diffraction contrast tomography. Materials Characterization, 2021, 172, 110814.	4.4	16
14	Combining X-ray microtomography and three-dimensional digital volume correlation to track microstructure evolution during sintering of copper powder. Journal of Strain Analysis for Engineering Design, 2014, 49, 257-269.	1.8	15
15	The production and characterization of topologically and mechanically gradient open-cell thermoplastic foams. Smart Materials and Structures, 2014, 23, 055016.	3.5	14
16	In-situ X-ray microtomography study of the movement of a granular material within a die. International Journal of Materials Research, 2012, 103, 162-169.	0.3	13
17	Three-Dimensional In Situ XCT Characterisation and FE Modelling of Cracking in Concrete. Complexity, 2018, 2018, 1-11.	1.6	8
18	Crystallographic tomography and molecular modelling of structured organic polycrystalline powders. CrystEngComm, 2021, 23, 2520-2531.	2.6	8

#	ARTICLE	IF	CITATIONS
19	Spallation response of Ti-6Al-4V: Rear surface velocimetry and X-ray tomography. AIP Conference Proceedings, 2012, , .	0.4	4
20	In Situ Investigation and Image-Based Modelling of Aluminium Foam Compression Using Micro X-Ray Computed Tomography. Augmented Vision and Reality, 2014, , 189-197.	0.2	2
21	A study of the progression of damage in an axially loaded Branta leucopsis femur using X-ray computed tomography and digital image correlation. PeerJ, 2017, 5, e3416.	2.0	2
22	Characterisation of Collagen Scaffolds using X-ray Microtomography. Materials Research Society Symposia Proceedings, 2002, 758, 521.	0.1	0
23	SHOCK LOADING AND TAYLOR IMPACT OF Ti-6Al-4V. , 2008, , .		0
24	Back Cover: <i>In situ</i> 3D X-ray microtomography study comparing auxetic and non-auxetic polymeric foams under tension (Phys. Status Solidi B 1/2011). Physica Status Solidi (B): Basic Research, 2011, 248, .	1.5	0